

**AMENDMENTS TO THE CLAIMS**

1-18. (canceled).

19. (New) A method for preventing, improving or treating of inflammatory bowel disease (IBD), comprising administering a therapeutic agent comprising an effective amount of anti-CD81 antibody to a mammal in need thereof.

20. (New) The method according to claim 19, wherein the anti-CD81 antibody is a monoclonal antibody.

21. (New) A method for screening a substance as an active ingredient for preventing, improving or treating IBD, comprising:

- (a) contacting cells capable of expressing CD81 gene with a test substance,
- (b) measuring an amount of CD81 gene expression in the cells contacted with the test substance, and comparing the amount with an amount of the corresponding gene expression in control cells not contacted with the test substance, and
- (c) selecting the test substance reducing the amount of CD81 gene expression on the basis of the comparison results in (b).

22. (New) A method for screening a substance as an active ingredient for preventing, improving or treating IBD, comprising:

- (a) contacting cells capable of expressing CD81 with a test substance,
- (b) measuring an expression amount of CD81 in the cells contacted with the test substance, and comparing the expression amount with an expression amount of the protein in control cells not contacted with the test substance, and
- (c) selecting the test substance reducing the expression amount of CD81 on the basis of the comparison results in (b),

23. (New) A method for screening a substance as an active ingredient for preventing, improving or treating IBD, comprising:

- (a) contacting a test substance with CD81,
- (b) measuring function (activity) of CD81 after contact with the test substance, and comparing the function (activity) with function (activity) of CD81 not contacted with the test substance, and
- (c) selecting the test substance inhibiting the function (activity) of CD81 on the basis of the comparison results in (b).

24. (New) A disease marker for IBD, which comprises a polynucleotide having at least 15 continuous bases in the base sequence of a CD81 gene or a polynucleotide complementary thereto.

25. (New) A probe or primer comprising the disease marker of claim 24.

26. (New) A method for diagnosing IBD, which comprises:

- (a) binding a RNA prepared from a biopsy of a subject or a complementary polynucleotide transcribed therefrom to the disease marker of claim 24 or,
- (b) measuring the amount of CD81 RNA derived from the biopsy using the disease marker as an index, and
- (c) diagnosing IBD on the basis of the measurement results in (b).

27. (New) The method for diagnosing IBD of claim 26, wherein the step of diagnosing IBD described in (c) is performed by comparing the measurement result of the subject with a measurement result of a normal person, in which an increase of the amount bound to the disease marker indicates a diagnosis of IBD.

28. (New) A disease marker for IBD comprising an antibody which recognizes CD81.

29. (New) A method for diagnosing IBD, which comprises:

- (a) binding a protein prepared from a biopsy of a subject to the disease marker of claim 28,
- (b) measuring the protein derived from the biopsy bound to the disease marker using the disease marker as an index, and
- (c) diagnosing IBD on the basis of the measurement results in (b).

30. (New) The method for diagnosing IBD of claim 29, wherein the step of diagnosing IBD in (c) is performed by comparing the measurement result of the subject with a measurement result of a normal person, in which an increase of an amount bound to the disease marker indicates a diagnosis of IBD.